



Katie M. Brown  
Counsel

Duke Energy  
40 W. Broad Street  
Suite 690  
Greenville, SC 29601

O: 864-370-5296  
F: 864-370-5027

Katie.Brown2@duke-energy.com

October 28, 2021

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Executive Director  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, SC 29210

**Re: Duke Energy Progress, LLC- Monthly Fuel Report  
Docket Number: 2006-176-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of September 2021.

Sincerely,

Katie M. Brown

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff  
Ms. Nanette Edwards, Office of Regulatory Staff  
Mr. Andrew Bateman, Office of Regulatory Staff  
Mr. Michael Seaman-Huynh, Office of Regulatory Staff  
Mr. Ryder Thompson, Office of Regulatory Staff

## Schedule 1

DUKE ENERGY PROGRESS  
SUMMARY OF MONTHLY FUEL REPORT

Line No.	Item	SEPTEMBER 2021
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 118,140,580
	MWH sales:	
2	Total System Sales	6,126,398
3	Less intersystem sales	478,871
4	Total sales less intersystem sales	5,647,527
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	2.0919
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	2.2764
	Generation Mix (MWH):	
	Fossil (By Primary Fuel Type):	
7	Coal	535,645
8	Oil	4,068
9	Natural Gas - Combustion Turbine	85,162
10	Natural Gas - Combined Cycle	1,610,998
11	Biogas	715
12	Total Fossil	2,236,588
13	Nuclear	2,602,651
14	Hydro - Conventional	36,355
15	Solar Distributed Generation	23,191
16	Total MWH generation	4,898,785

## Notes:

Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS  
DETAILS OF FUEL AND FUEL-RELATED COSTS

Description	SEPTEMBER 2021
<b>Fuel and Fuel-Related Costs:</b>	
<b>Steam Generation - Account 501</b>	
0501110 coal consumed - steam	\$ 14,249,659
0501310 fuel oil consumed - steam	413,017
Total Steam Generation - Account 501	<u>14,662,676</u>
<b>Nuclear Generation - Account 518</b>	
0518100 burnup of owned fuel	15,497,718
<b>Other Generation - Account 547</b>	
0547000 natural gas consumed - Combustion Turbine	2,020,697
0547000 natural gas capacity - Combustion Turbine	498,646
0547000 natural gas consumed - Combined Cycle	41,100,665
0547000 natural gas capacity - Combined Cycle	11,392,134
0547106 biogas consumed - Combined Cycle	30,652
0547200 fuel oil consumed	352,751
Total Other Generation - Account 547	<u>55,395,545</u>
<b>Purchased Power and Net Interchange - Account 555</b>	
Fuel and fuel-related component of purchased power	39,419,770
Fuel and fuel-related component of DERP purchases	74,512
PURPA purchased power capacity	11,311,110
DERP purchased power capacity	15,262
Total Purchased Power and Net Interchange - Account 555	<u>50,820,654</u>
<b>Less:</b>	
Fuel and fuel-related costs recovered through intersystem sales	19,179,992
Solar Integration Charge	36
Miscellaneous Fees Collected	-
Total Fuel Credits - Accounts 447/456	<u>19,180,028</u>
<b>Total Costs Included in Base Fuel Component</b>	<b>\$ 117,196,565</b>
<b>Environmental Costs</b>	
0509030, 0509212, 0557451 emission allowance expense	\$ 2,782
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense	1,033,560
Emission Allowance Gains	-
Less reagents expense recovered through intersystem sales - Account 447	67,679
Less emissions expense recovered through intersystem sales - Account 447	<u>24,648</u>
<b>Total Costs Included in Environmental Component</b>	<b>944,015</b>
<b>Fuel and Fuel-related Costs excluding DERP incremental costs</b>	<b><u>\$ 118,140,580</u></b>
<b>DERP Incremental Costs</b>	<b>332,842</b>
<b>Total Fuel and Fuel-related Costs</b>	<b><u>\$ 118,473,422</u></b>

## Notes:

Detail amounts may not add to totals shown due to rounding.  
DERP details are presented on Page 2.

DUKE ENERGY PROGRESS  
DETAILS OF FUEL AND FUEL-RELATED COSTS

Description	SEPTEMBER 2021
DERP Avoided Costs (Total Capacity and Energy)	
Purchased Power Agreements	\$ 7,653
Shared Solar Program	802
Total DERP Avoided Costs	<u>\$ 8,456</u>
DERP Incremental Costs	
Purchased Power Agreements	11,482
DERP NEM Incentive	190,440
Solar Rebate Program - Amortization	51,614
Solar Rebate Program - Carrying Costs	39,000
Shared Solar Program	10,263
NEM Avoided Capacity Costs	545
NEM Meter Costs	12,037
General and Administrative Expenses	17,410
Interest on under-collection due to cap	50
Total DERP Incremental Costs	<u>\$ 332,842</u>

Notes:  
Detail amounts may not add to totals shown due to rounding.  
All amounts represent SC retail.

**DUKE ENERGY PROGRESS  
PURCHASED POWER AND INTERCHANGE  
SOUTH CAROLINA**

Schedule 3, Purchases  
Page 1 of 2

**SEPTEMBER 2021**

<b>Purchased Power</b>	<b>Total</b>	<b>Capacity</b>	<b>Non-capacity</b>		
<b>Marketers, Utilities, Other</b>	<b>\$</b>	<b>\$</b>	<b>mWh</b>	<b>Fuel \$</b>	<b>Non-fuel \$</b>
Broad River Energy, LLC	\$ 4,612,826	\$ 3,303,833	23,674	\$ 1,308,993	-
City of Fayetteville	1,089,009	1,015,250	-	73,759	-
DE Carolinas - Native Load Transfer	1,953,881	-	42,912	1,953,881	-
DE Carolinas - Native Load Transfer Benefit	214,986	-	-	214,986	-
DE Carolinas - Fees	216	-	-	216	-
Haywood EMC	28,000	28,000	-	-	-
NCEMC	2,916,468	2,117,388	11,846	799,080	-
PJM Interconnection, LLC	(522)	-	-	(522)	-
Southern Company Services	11,327,737	1,965,877	190,991	9,361,860	-
Energy Imbalance	23,221	-	514	22,445	\$ 776
Generation Imbalance	178	-	24	125	53
	<b>\$ 22,166,000</b>	<b>\$ 8,430,348</b>	<b>269,961</b>	<b>\$ 13,734,823</b>	<b>\$ 829</b>
<b>Act 236 PURPA Purchases</b>					
DERP Qualifying Facilities	\$ 104,112	-	2,510	\$ 104,112	-
Other Qualifying Facilities	22,008,738	-	314,119	22,008,738	-
Renewable Energy	14,943,084	-	206,054	14,943,084	-
Competitive Procurement Renewable Energy	44,235	-	1,485	44,235	-
	<b>\$ 37,100,169</b>	<b>-</b>	<b>524,168</b>	<b>\$ 37,100,169</b>	<b>-</b>
<b>Total Purchased Power</b>	<b>\$ 59,266,169</b>	<b>\$ 8,430,348</b>	<b>794,129</b>	<b>\$ 50,834,992</b>	<b>\$ 829</b>

NOTE: Detail amounts may not add to totals shown due to rounding.

**DUKE ENERGY PROGRESS  
INTERSYSTEM SALES\*  
SOUTH CAROLINA**

**Schedule 3, Sales  
Page 2 of 2**

**SEPTEMBER 2021**

<b>Sales</b>	<b>Total \$</b>	<b>Capacity \$</b>	<b>mWh</b>	<b>Non-capacity Fuel \$</b>	<b>Non-fuel \$</b>
<b>Utilities:</b>					
DE Carolinas - As Available Capacity	\$ 12,215	\$ 12,215	-	-	-
<b>Market Based:</b>					
NCEMC Purchase Power Agreement	1,226,820	652,500	9,646	\$ 469,795	\$ 104,525
PJM Interconnection, LLC	(534)	-	-	-	(534)
<b>Other:</b>					
DE Carolinas - Native Load Transfer	17,692,154	-	469,205	17,060,738	631,416
DE Carolinas - Native Load Transfer Benefit	1,741,786	-	-	1,741,786	-
Generation Imbalance	(10)	-	20	-	(10)
<b>Total Intersystem Sales</b>	<b>\$ 20,672,431</b>	<b>\$ 664,715</b>	<b>478,871</b>	<b>\$ 19,272,319</b>	<b>\$ 735,397</b>

\* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress  
(Over) / Under Recovery of Fuel Costs  
SEPTEMBER 2021

Schedule 4  
Page 1 of 3

			Total Residential	General Service Non-Demand	Demand	Lighting	Total
Line No.							
1	Actual System kWh sales	Input					5,647,527,373
2	DERP Net Metered kWh generation	Input					2,949,843
3	Adjusted System kWh sales	L1 + L2					5,650,477,216
4	Actual S.C. Retail kWh sales	Input	193,502,319	28,260,804	304,023,599	6,149,036	531,935,758
5	DERP Net Metered kWh generation	Input	1,836,244	46,756	1,066,843		2,949,843
6	Adjusted S.C. Retail kWh sales	L4 + L5	195,338,563	28,307,560	305,090,442	6,149,036	534,885,601
7	Actual S.C. Demand units (kw)	L32 / 31b *100			656,100		
Base fuel component of recovery - non-capacity							
8	Incurred System base fuel - non-capacity expense	Input					\$93,904,902
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$66,494
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$93,971,396
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					1.663
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$3,248,617	\$470,775	\$5,073,868	\$102,263	\$8,895,523
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$30,404)	(\$4,206)	(\$31,885)	\$0	(\$66,494)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$3,218,213	\$466,569	\$5,041,983	\$102,263	\$8,829,029
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	1.873	1.874	1.874	1.874	1.874
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$3,625,186	\$529,607	\$5,697,402	\$115,233	\$9,967,428
17	DERP NEM incentive - fuel component	Input	(\$710)	(\$98)	(\$745)	\$0	(\$1,553)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$3,624,476	\$529,509	\$5,696,657	\$115,233	\$9,965,875
19	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L14 - L18	(\$406,263)	(\$62,940)	(\$654,674)	(\$12,970)	(\$1,136,847)
20	Adjustment	Input					
21	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L19 + L20	(\$406,263)	(\$62,940)	(\$654,674)	(\$12,970)	(\$1,136,847)
Base fuel component of recovery - capacity							
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.516	0.489			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			160		
23	Incurred S.C. base fuel - capacity expense	Input	\$999,240	\$138,217	\$1,047,909		\$2,185,366
24a	Billed base fuel - capacity rates by class (¢/kWh) - Note 2	Input	0.462	0.580			
24b	Billed base fuel - capacity rate (¢/kW)	Input			157		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$893,328	\$163,913	\$1,030,612	\$0	\$2,087,853
26	S.C. base fuel - capacity (over)/under recovery [See footnote]	L23 - L25	\$105,912	(\$25,696)	\$17,297	\$0	\$97,513
27	Adjustment	Input					
28	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L26 + L27	\$105,912	(\$25,696)	\$17,297	\$0	\$97,513
Environmental component of recovery							
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.021	0.020			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			6		
30	Incurred S.C. environmental expense	Input	\$40,656	\$5,624	\$42,636		\$88,916
31a	Billed environmental rates by class (¢/kWh) - Note 3	Input	0.005	0.015			
31b	Billed environmental rate (¢/kW)	Input			4		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$9,606	\$4,239	\$26,244		\$40,089
33	S.C. environmental (over)/under recovery [See footnote]	L30 - L32	\$31,050	\$1,385	\$16,392	\$0	\$48,827
34	Adjustment	Input					
35	Total S.C. environmental (over)/under recovery [See footnote]	L33 + L34	\$31,050	\$1,385	\$16,392	\$0	\$48,827
Distributed Energy Resource Program component of recovery: avoided costs							
36a	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	L37 / L4 * 100	0.002	0.002			
36b	Incurred S.C. DERP avoided cost rates by class (¢/kW)	L37 / L7 * 100			1		
37	Incurred S.C. DERP avoided cost expense	Input	\$3,866	\$535	\$4,055		\$8,456
38a	Billed S.C. DERP avoided cost rates by class (¢/kWh) - Note 4	Input	0.003	0.004			
38b	Billed S.C. DERP avoided cost rates by class (¢/kW)	Input			1		
39	Billed S.C. DERP avoided cost revenue	L38a * L4 /100	\$5,764	\$1,130	\$6,559		\$13,453
40	S.C. DERP avoided cost (over)/under recovery [See footnote]	L37 - L39	(\$1,898)	(\$595)	(\$2,504)	\$0	(\$4,997)
41	Adjustment	Input					
42	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L40 + L41	(\$1,898)	(\$595)	(\$2,504)	\$0	(\$4,997)
43	Total (over)/under recovery [See footnote]	L21 + L28 + L35 + L42	(\$271,199)	(\$87,846)	(\$623,489)	(\$12,970)	(\$995,504)

Duke Energy Progress  
(Over) / Under Recovery of Fuel Costs  
SEPTEMBER 2021

Schedule 4  
Page 2 of 3

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - <b>BASE FUEL NON-CAPACITY</b>						
Balance ending February 2021	\$10,892,003	5,429,351	468,956	4,889,765	103,931	10,892,003
March 2021 - actual	10,684,199	(89,214)	(9,718)	(106,292)	(2,580)	(207,804)
April 2021 - actual	10,033,278	(193,518)	(28,845)	(420,114)	(8,444)	(650,921)
May 2021 - actual	12,543,282	711,542	104,099	1,658,133	36,230	2,510,004
June 2021 - actual	14,049,424	474,479	66,073	946,736	18,854	1,506,142
July 2021 - actual	15,898,751	648,783	86,388	1,093,436	20,720	1,849,327
August 2021 - actual	19,073,760	1,036,684	138,270	1,968,622	31,433	3,175,009
September 2021 - actual	17,936,913	(406,263)	(62,940)	(654,674)	(12,970)	(1,136,847)
October 2021 - forecast	15,901,603	(618,034)	(93,693)	(1,292,762)	(30,821)	(2,035,310)
November 2021 - forecast	15,562,900	(104,266)	(15,493)	(213,801)	(5,143)	(338,703)
December 2021 - forecast	16,381,275	304,553	33,984	468,581	11,257	818,375
January 2022 - forecast	17,218,534	337,595	33,040	455,700	10,924	837,259
February 2022 - forecast	17,341,755	50,298	4,818	66,514	1,591	123,221
March 2022 - forecast	17,467,361	46,754	5,212	71,918	1,722	125,606
April 2022 - forecast	16,566,578	(313,384)	(38,837)	(535,715)	(12,847)	(900,783)
May 2022 - forecast	16,249,309	(95,605)	(14,663)	(202,160)	(4,841)	(317,269)
June 2022 - forecast	\$16,638,969	135,945	16,769	231,440	5,506	389,660
		7,355,700	693,420	8,425,327	164,522	16,638,969

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - <b>BASE FUEL CAPACITY</b>						
Balance ending February 2021	\$5,044,753	1,223,539	181,264	3,639,950	-	5,044,753
March 2021 - actual	5,042,812	(143,103)	39,099	102,063	-	(1,941)
April 2021 - actual	5,585,129	186,048	61,096	295,173	-	542,317
May 2021 - actual	6,269,253	303,937	64,155	316,032	-	684,124
June 2021 - actual	6,506,915	14,070	33,286	190,306	-	237,662
July 2021 - actual	7,210,840	244,280	42,063	417,582	-	703,925
August 2021 - actual	7,366,024	128,139	(14,819)	41,864	-	155,184
September 2021 - actual	7,463,537	105,912	(25,696)	17,297	-	97,513
October 2021 - forecast	7,257,072	126,293	(22,198)	(310,560)	-	(206,465)
November 2021 - forecast	7,280,048	119,422	(17,838)	(78,608)	-	22,976
December 2021 - forecast	6,479,770	(222,244)	(33,166)	(544,868)	-	(800,278)
January 2022 - forecast	5,593,750	(389,199)	(37,644)	(459,177)	-	(886,020)
February 2022 - forecast	4,839,366	(379,348)	(32,873)	(342,163)	-	(754,384)
March 2022 - forecast	4,611,622	(72,314)	(12,294)	(143,136)	-	(227,744)
April 2022 - forecast	4,543,832	52,409	(7,949)	(112,250)	-	(67,790)
May 2022 - forecast	4,503,307	178,459	(13,208)	(205,776)	-	(40,525)
June 2022 - forecast	\$4,086,821	(78,884)	(26,552)	(311,050)	-	(416,486)
		1,397,416	176,726	2,512,679	-	4,086,821

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - <b>ENVIRONMENTAL</b>						
Balance ending February 2021	(\$348,874)	(289,820)	(24,096)	(34,958)	0	(348,874)
March 2021 - actual	(370,923)	(10,494)	1,297	(12,852)	0	(22,049)
April 2021 - actual	(417,815)	(19,133)	(856)	(26,903)	0	(46,892)
May 2021 - actual	(364,529)	28,726	5,234	19,326	0	53,286
June 2021 - actual	(216,533)	68,730	11,233	68,033	0	147,996
July 2021 - actual	(15,048)	94,903	13,098	93,484	0	201,485
August 2021 - actual	186,473	101,086	11,206	89,229	0	201,521
September 2021 - actual	235,300	31,050	1,385	16,392	0	48,827
October 2021 - forecast	287,126	35,228	2,308	14,290	0	51,826
November 2021 - forecast	353,915	38,807	3,049	24,933	0	66,789
December 2021 - forecast	529,885	91,611	10,656	73,703	0	175,970
January 2022 - forecast	799,826	132,504	16,486	120,951	0	269,941
February 2022 - forecast	1,049,122	122,021	15,061	112,214	0	249,296
March 2022 - forecast	1,095,814	29,651	2,089	14,952	0	46,692
April 2022 - forecast	1,117,076	18,456	437	2,369	0	21,262
May 2022 - forecast	1,160,330	30,195	1,791	11,268	0	43,254
June 2022 - forecast	\$1,232,207	42,823	3,664	25,390	0	71,877
		546,344	74,042	611,821	0	1,232,207

	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Total
Cumulative (over) / under recovery - <b>DERP AVOIDED COSTS</b>						
Balance ending February 2021	(19,309)	(15,563)	510	(4,256)	-	(19,309)
March 2021 - actual	(30,648)	(799)	179	(10,719)	-	(11,339)
April 2021 - actual	(32,187)	3,561	690	(5,790)	-	(1,539)
May 2021 - actual	(27,598)	6,523	1,049	(2,983)	-	4,589
June 2021 - actual	(26,468)	4,740	851	(4,461)	-	1,130
July 2021 - actual	(32,855)	(579)	(71)	(5,737)	-	(6,387)
August 2021 - actual	(32,546)	529	(208)	(12)	-	309
September 2021 - actual	(37,543)	(1,898)	(595)	(2,504)	-	(4,997)
October 2021 - forecast	(39,508)	492	(247)	(2,210)	-	(1,965)
November 2021 - forecast	(41,208)	(99)	(289)	(1,312)	-	(1,700)
December 2021 - forecast	(48,838)	(2,605)	(429)	(4,596)	-	(7,630)
January 2022 - forecast	(56,087)	(3,254)	(399)	(3,596)	-	(7,249)
February 2022 - forecast	(62,266)	(3,087)	(354)	(2,738)	-	(6,179)
March 2022 - forecast	(63,312)	(307)	(111)	(628)	-	(1,046)
April 2022 - forecast	(61,073)	1,530	61	648	-	2,239
May 2022 - forecast	(55,431)	3,821	229	1,592	-	5,642
June 2022 - forecast	(55,380)	707	(60)	(596)	-	51
		(6,288)	806	(49,898)	-	(55,380)



Duke Energy Progress  
(Over) / Under Recovery of Fuel Costs  
SEPTEMBER 2021

Schedule 4  
Page 3 of 3

Line No.			Residential	Commercial	Industrial	Total
Distributed Energy Resource Program component of recovery: incremental costs						
44	Incurring S.C. DERP incremental expense	Input	\$152,189	\$109,836	\$70,817	\$332,842
45	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.99	3.51	99.47	
46	Billed S.C. DERP incremental revenue	Input	\$139,708	\$115,247	\$26,940	\$281,895
47	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L46	12,481	(\$5,411)	\$43,877	\$50,947
48	Adjustment	Input				
49	Total S.C. DERP incremental (over)/under recovery [See footnote]	L47 + L48	\$12,481	(\$5,411)	\$43,877	\$50,947

Cumulative (over) / under recovery	Cumulative	Total Residential	Commercial	Industrial	Total
Balance ending February 2021	\$173,595	91,878	9,063	72,654	173,595
March 2021 - actual	164,763	(14,575)	(29,089)	34,832	(8,832)
April 2021 - actual	179,864	(2,281)	(20,080)	37,462	15,101
May 2021 - actual	197,477	(1,273)	(19,497)	38,383	17,613
June 2021 - actual	227,799	4,764	(15,382)	40,940	30,322
July 2021 - actual	285,295	16,483	(4,987)	46,000	57,496
August 2021 - actual	330,282	9,862	(7,391)	42,516	44,987
September 2021 - actual	381,229	12,481	(5,411)	43,877	50,947
October 2021 - forecast	468,529	39,918	28,808	18,574	87,300
November 2021 - forecast	557,201	40,545	29,261	18,866	88,672
December 2021 - forecast	643,499	39,459	28,478	18,361	86,298
January 2022 - forecast	729,018	39,103	28,221	18,195	85,519
February 2022 - forecast	814,552	39,109	28,226	18,199	85,534
March 2022 - forecast	892,279	35,540	25,649	16,538	77,727
April 2022 - forecast	984,307	42,079	30,369	19,580	92,028
May 2022 - forecast	1,077,150	42,451	30,638	19,754	92,843
June 2022 - forecast	\$1,167,493	41,308	29,813	19,222	90,343
		476,851	166,689	523,953	1,167,493

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

\_/1 Total residential billed fuel non-capacity rate is a composite rate reflecting the 7/1/21 approved residential rate of 1.887 and RECD 5% discount.

\_/2 Total residential billed fuel capacity rate is a composite rate reflecting the 7/1/21 approved residential rate of .465 and RECD 5% discount.

\_/3 Total residential billed environmental rate is a composite rate reflecting the 7/1/21 approved residential rate of .005 and RECD 5% discount.

\_/4 Total residential billed DERP avoided capacity rate is a composite rate reflecting the 7/1/21 approved residential rate of .003 and RECD 5% discount.

**Duke Energy Progress**  
**Fuel and Fuel Related Cost Report**  
**SEPTEMBER 2021**

**Schedule 5**  
**Page 1 of 2**

Description	Mayo Steam	Roxboro Steam	Asheville CC/CT	Smith Energy Complex CC/CT	Sutton CC/CT	Lee CC	Blewett CT
<b>Cost of Fuel Purchased (\$)</b>							
Coal	\$2,993,112	\$18,202,854	-	-	-	-	-
Oil	101,582	352,387	-	-	-	-	-
Gas - CC	-	-	\$10,226,749	\$13,855,256	\$12,807,756	\$15,603,038	-
Gas - CT	-	-	435,245	1,350,606	193,048	-	-
Biogas	-	-	-	140,881	-	-	-
Total	\$3,094,694	\$18,555,241	\$10,661,994	\$15,346,743	\$13,000,804	\$15,603,038	-
<b>Average Cost of Fuel Purchased (¢/MBTU)</b>							
Coal	329.26	325.43	-	-	-	-	-
Oil	1,651.74	1,636.12	-	-	-	-	-
Gas - CC	-	-	460.99	385.06	462.13	407.51	-
Gas - CT	-	-	428.56	369.22	1,281.94	-	-
Biogas	-	-	-	2,639.70	-	-	-
Weighted Average	338.15	330.46	459.57	386.63	466.56	407.51	-
<b>Cost of Fuel Burned (\$)</b>							
Coal	\$188,509	\$14,061,150	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-
Oil - Steam/CT	20,036	392,981	-	-	\$17,032	-	-
Gas - CC	-	-	\$10,226,749	\$13,855,256	12,807,756	\$15,603,038	-
Gas - CT	-	-	435,245	1,350,606	193,048	-	-
Biogas	-	-	-	140,881	-	-	-
Nuclear	-	-	-	-	-	-	-
Total	\$208,545	\$14,454,131	\$10,661,994	\$15,346,743	\$13,017,836	\$15,603,038	-
<b>Average Cost of Fuel Burned (¢/MBTU)</b>							
Coal	256.40	234.25	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-
Oil - Steam/CT	1,490.77	1,519.35	-	-	2,003.76	-	-
Gas - CC	-	-	460.99	385.06	462.13	407.51	-
Gas - CT	-	-	428.56	369.22	1,281.94	-	-
Biogas	-	-	-	2,639.70	-	-	-
Nuclear	-	-	-	-	-	-	-
Weighted Average	278.56	239.77	459.57	386.63	467.03	407.51	-
<b>Average Cost of Generation (¢/kWh)</b>							
Coal	153.56	2.63	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-
Oil - Steam/CT	892.87	16.76	-	-	21.13	-	-
Gas - CC	-	-	3.21	3.16	3.56	3.15	-
Gas - CT	-	-	5.47	2.13	13.52	-	-
Biogas	-	-	-	19.70	-	-	-
Nuclear	-	-	-	-	-	-	-
Weighted Average	166.84	2.69	3.27	3.06	3.60	3.15	-
<b>Burned MBTU's</b>							
Coal	73,521	6,002,564	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-
Oil - Steam/CT	1,344	25,865	-	-	850	-	-
Gas - CC	-	-	2,218,435	3,598,207	2,771,465	3,828,826	-
Gas - CT	-	-	101,561	365,796	15,059	-	-
Biogas	-	-	-	5,337	-	-	-
Nuclear	-	-	-	-	-	-	-
Total	74,865	6,028,429	2,319,996	3,969,340	2,787,374	3,828,826	-
<b>Net Generation (mWh)</b>							
Coal	123	535,523	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-
Oil - Steam/CT	2	2,344	-	-	81	-	(24)
Gas - CC	-	-	318,230	437,996	359,600	495,172	-
Gas - CT	-	-	7,964	63,424	1,427	-	-
Biogas	-	-	-	715	-	-	-
Nuclear	-	-	-	-	-	-	-
Hydro (Total System)							
Solar (Total System)							
Total	125	537,867	326,194	502,135	361,108	495,172	(24)
<b>Cost of Reagents Consumed (\$)</b>							
Ammonia	-	\$267,673	-	\$22,124	-	-	-
Limestone	\$12,258	595,699	-	-	-	-	-
Re-emission Chemical	-	-	-	-	-	-	-
Sorbents	5,532	131,247	-	-	-	-	-
Urea	-	-	-	-	-	-	-
Total	\$17,790	\$994,619	-	\$22,124	-	-	-

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

**Duke Energy Progress**  
**Fuel and Fuel Related Cost Report**  
**SEPTEMBER 2021**

**Schedule 5**  
**Page 2 of 2**

Description	Darlington CT	Wayne County CT	Weatherspoon CT	Brunswick Nuclear	Harris Nuclear	Robinson Nuclear	Current Month	Total 12 ME SEPTEMBER 2021
<b>Cost of Fuel Purchased (\$)</b>								
Coal	-	-	-	-	-	-	\$21,195,966	\$234,258,059
Oil	-	-	-	-	-	-	453,969	7,139,808
Gas - CC	-	-	-	-	-	-	52,492,799	600,385,230
Gas - CT	\$2,084	\$538,336	\$24	-	-	-	2,519,343	66,998,635
Biogas	-	-	-	-	-	-	140,881	3,475,732
Total	\$2,084	\$538,336	\$24	-	-	-	\$76,802,958	\$912,257,464
<b>Average Cost of Fuel Purchased (¢/MBTU)</b>								
Coal	-	-	-	-	-	-	325.97	340.98
Oil	-	-	-	-	-	-	1,639.59	1,397.91
Gas - CC	-	-	-	-	-	-	422.75	419.57
Gas - CT	366.90	365.84	-	-	-	-	399.81	373.85
Biogas	-	-	-	-	-	-	2,639.70	2,864.55
Weighted Average	366.90	365.84	-	-	-	-	392.20	396.03
<b>Cost of Fuel Burned (\$)</b>								
Coal	-	-	-	-	-	-	\$14,249,659	\$287,397,888
Oil - CC	-	-	-	-	-	-	-	4,145
Oil - Steam/CT	-	\$335,720	-	-	-	-	765,769	18,267,691
Gas - CC	-	-	-	-	-	-	52,492,799	600,385,230
Gas - CT	\$2,084	538,336	\$24	-	-	-	2,519,343	66,998,635
Biogas	-	-	-	-	-	-	140,881	3,475,732
Nuclear	-	-	-	\$7,812,456	\$4,364,704	\$3,320,558	15,497,718	172,800,239
Total	\$2,084	\$874,056	\$24	\$7,812,456	\$4,364,704	\$3,320,558	\$85,666,169	\$1,149,329,560
<b>Average Cost of Fuel Burned (¢/MBTU)</b>								
Coal	-	-	-	-	-	-	234.52	326.01
Oil - CC	-	-	-	-	-	-	-	1,570.08
Oil - Steam/CT	-	1,742.01	-	-	-	-	1,617.90	1,516.20
Gas - CC	-	-	-	-	-	-	422.75	419.57
Gas - CT	366.90	365.84	-	-	-	-	399.81	373.85
Biogas	-	-	-	-	-	-	2,639.70	2,864.55
Nuclear	-	-	-	54.89	60.30	57.90	56.96	56.70
Weighted Average	366.90	525.20	-	54.89	60.30	57.90	184.70	206.99
<b>Average Cost of Generation (¢/kWh)</b>								
Coal	-	-	-	-	-	-	2.66	3.75
Oil - CC	-	-	-	-	-	-	-	15.67
Oil - Steam/CT	-	20.17	-	-	-	-	18.82	22.07
Gas - CC	-	-	-	-	-	-	3.26	3.00
Gas - CT	-	4.30	-	-	-	-	2.96	4.25
Biogas	-	-	-	-	-	-	19.70	20.84
Nuclear	-	-	-	0.58	0.62	0.60	0.60	0.59
Weighted Average	-	6.17	-	0.58	0.62	0.60	1.75	1.92
<b>Burned MBTU's</b>								
Coal	-	-	-	-	-	-	6,076,085	88,156,019
Oil - CC	-	-	-	-	-	-	-	264
Oil - Steam/CT	-	19,272	-	-	-	-	47,331	1,204,830
Gas - CC	-	-	-	-	-	-	12,416,933	143,093,675
Gas - CT	568	147,151	-	-	-	-	630,135	17,921,081
Biogas	-	-	-	-	-	-	5,337	121,336
Nuclear	-	-	-	14,233,254	7,238,836	5,734,495	27,206,585	304,766,042
Total	568	166,423	-	14,233,254	7,238,836	5,734,495	46,382,406	555,263,247
<b>Net Generation (mWh)</b>								
Coal	-	-	-	-	-	-	535,645	7,665,527
Oil - CC	-	-	-	-	-	-	-	26
Oil - Steam/CT	-	1,665	-	-	-	-	4,068	82,759
Gas - CC	-	-	-	-	-	-	1,610,998	20,027,797
Gas - CT	(105)	12,511	(60)	-	-	-	85,162	1,578,236
Biogas	-	-	-	-	-	-	715	16,675
Nuclear	-	-	-	1,348,649	702,654	551,348	2,602,651	29,256,300
Hydro (Total System)							36,355	842,986
Solar (Total System)							23,191	251,937
Total	(105)	14,176	(60)	1,348,649	702,654	551,348	4,898,785	59,722,244
<b>Cost of Reagents Consumed (\$)</b>								
Ammonia	-	-	-	-	-	-	\$289,797	\$2,591,254
Limestone	-	-	-	-	-	-	607,957	9,922,617
Re-emission Chemical	-	-	-	-	-	-	-	69,146
Sorbents	-	-	-	-	-	-	136,779	3,418,594
Urea	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	\$1,034,533	\$16,001,611

**Duke Energy Progress**  
**Fuel & Fuel-related Consumption and Inventory Report**  
**SEPTEMBER 2021**

**Schedule 6**  
**Page 1 of 2**

Description	Mayo	Roxboro	Asheville	Smith Energy Complex	Sutton	Lee	Blewett
<b>Coal Data:</b>							
Beginning balance	83,049	277,789	-	-	-	-	-
Tons received during period	35,699	220,197	-	-	-	-	-
Inventory adjustments	39,131	188,026	-	-	-	-	-
Tons burned during period	2,866	238,771	-	-	-	-	-
Ending balance	155,013	447,241	-	-	-	-	-
MBTUs per ton burned	25.65	25.14	-	-	-	-	-
Cost of ending inventory (\$/ton)	65.77	58.88	-	-	-	-	-
<b>Oil Data:</b>							
Beginning balance	247,701	361,572	3,123,041	6,657,712	2,450,460	-	693,454
Gallons received during period	44,562	156,076	-	-	-	-	-
Miscellaneous use and adjustments	(141)	(7,431)	-	-	-	-	-
Gallons burned during period	9,776	188,025	-	-	6,073	-	-
Ending balance	282,346	322,192	3,123,041	6,657,712	2,444,387	-	693,454
Cost of ending inventory (\$/gal)	2.05	2.09	2.15	2.33	2.80	-	2.37
<b>Natural Gas Data:</b>							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	2,244,757	3,831,350	2,693,215	3,700,647	-
MCF burned during period	-	-	2,244,757	3,831,350	2,693,215	3,700,647	-
Ending balance	-	-	-	-	-	-	-
<b>Biogas Data:</b>							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	-	5,160	-	-	-
MCF burned during period	-	-	-	5,160	-	-	-
Ending balance	-	-	-	-	-	-	-
<b>Limestone/Lime Data:</b>							
Beginning balance	11,676	26,170	-	-	-	-	-
Tons received during period	417	15,289	-	-	-	-	-
Inventory adjustments	(1,117)	-	-	-	-	-	-
Tons consumed during period	169	11,401	-	-	-	-	-
Ending balance	10,807	30,058	-	-	-	-	-
Cost of ending inventory (\$/ton)	73.35	50.99	-	-	-	-	-

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.



## Schedule 7

**DUKE ENERGY PROGRESS  
ANALYSIS OF COAL PURCHASED  
SEPTEMBER 2021**

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
<b>MAYO</b>	SPOT	11,369	\$ 865,310	\$ 76.11
	CONTRACT	24,330	1,974,397	81.15
	FIXED TRANSPORTATION/ADJUSTMENTS	-	153,405	-
	TOTAL	35,699	\$ 2,993,112	83.84
<b>ROXBORO</b>	SPOT	110,605	\$ 8,678,235	\$ 78.46
	CONTRACT	109,592	8,891,485	81.13
	FIXED TRANSPORTATION/ADJUSTMENTS	-	633,134	-
	TOTAL	220,197	\$ 18,202,854	\$ 82.67
<b>ALL PLANTS</b>	SPOT	121,974	\$ 9,543,545	\$ 78.24
	CONTRACT	133,922	10,865,882	81.14
	FIXED TRANSPORTATION/ADJUSTMENTS	-	786,539	-
	TOTAL	255,896	\$ 21,195,966	\$ 82.83

## Schedule 8

**DUKE ENERGY PROGRESS  
ANALYSIS OF COAL QUALITY RECEIVED  
SEPTEMBER 2021**

<b>STATION</b>	<b>PERCENT MOISTURE</b>	<b>PERCENT ASH</b>	<b>HEAT VALUE</b>	<b>PERCENT SULFUR</b>
<b>MAYO</b>	6.12	9.02	12,732	1.86
<b>ROXBORO</b>	6.36	9.40	12,701	1.92

## Schedule 9

**DUKE ENERGY PROGRESS  
ANALYSIS OF OIL PURCHASED  
SEPTEMBER 2021**

	<u>MAYO</u>	<u>ROXBORO</u>
<b>VENDOR</b>	Indigo	Indigo
<b>SPOT/CONTRACT</b>	Contract	Contract
<b>SULFUR CONTENT %</b>	0	0
<b>GALLONS RECEIVED</b>	44,562	156,076
<b>TOTAL DELIVERED COST</b>	\$ 101,582	\$ 352,387
<b>DELIVERED COST/GALLON</b>	\$ 2.28	\$ 2.26
<b>BTU/GALLON</b>	138,000	138,000



**Duke Energy Progress Power Plant Performance Data Twelve Month Summary**  
**Report Period: October 2020 - September 2021**

<b>Unit</b>	<b>Net Generation (MWH)</b>	<b>Capacity Rating (MW)</b>	<b>Capacity Factor (%)</b>	<b>Equivalent Availability (%)</b>
Brunswick 1	8,045,346	938	97.91	96.05
Brunswick 2	7,399,540	932	90.63	90.21
Harris 1	7,812,201	964	92.51	90.91
Robinson 2	5,999,213	759	90.23	88.72

EAF is calculated using Standard NERC calculation and excludes OMC events

**Duke Energy Progress  
Power Plant Performance Data  
Twelve Month Summary  
October, 2020 through September, 2021  
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	967,053	225	49.06	60.90
Lee Energy Complex	1B	881,915	227	44.35	55.39
Lee Energy Complex	1C	1,074,885	228	53.82	67.04
Lee Energy Complex	ST1	1,952,934	379	58.82	78.15
Lee Energy Complex	Block Total	4,876,787	1,059	52.57	67.22
Smith Energy Complex	7	1,023,131	193	60.44	73.39
Smith Energy Complex	8	975,139	193	57.60	71.80
Smith Energy Complex	ST4	1,159,484	184	72.13	78.96
Smith Energy Complex	9	1,270,387	215	67.37	82.46
Smith Energy Complex	10	1,300,365	215	68.96	83.84
Smith Energy Complex	ST5	1,651,900	251	75.13	92.70
Smith Energy Complex	Block Total	7,380,406	1,252	67.32	81.20
Sutton Energy Complex	1A	1,308,430	224	66.68	81.17
Sutton Energy Complex	1B	1,309,165	224	66.72	81.29
Sutton Energy Complex	ST1	1,597,957	271	67.31	91.92
Sutton Energy Complex	Block Total	4,215,552	719	66.93	85.26
Asheville CC	ACC CT5	1,168,591	191	70.03	83.53
Asheville CC	ACC CT7	1,211,857	191	72.62	78.56
Asheville CC	ACC ST6	579,749	90	73.53	75.69
Asheville CC	ACC ST8	611,557	90	77.57	83.89
Asheville CC	Block Total	3,571,754	561	72.68	80.66

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

**Duke Energy Progress  
Power Plant Performance Data  
Twelve Month Summary  
October, 2020 through September, 2021**

**Intermediate Steam Units**

<b>Unit Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Capacity Factor (%)</b>	<b>Equivalent Availability (%)</b>
Mayo 1	1,302,194	721	20.61	38.30
Roxboro 2	1,754,201	673	29.76	77.32
Roxboro 3	2,410,426	698	39.42	71.52
Roxboro 4	1,540,920	711	24.74	59.13

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Power Plant Performance Data  
Twelve Month Summary  
October, 2020 through September, 2021  
Other Cycling Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Roxboro 1	677,677	380	20.36	90.33

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Power Plant Performance Data  
Twelve Month Summary  
October, 2020 through September, 2021  
Combustion Turbine Stations**

<b>Station Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Operating Availability (%)</b>
Asheville CT	115,063	364	92.95
Blewett CT	43	68	80.07
Darlington CT	4,100	265	94.18
Smith Energy Complex CT	1,163,076	954	85.51
Sutton Fast Start CT	32,783	98	89.01
Wayne County	325,117	959	94.87
Weatherspoon CT	922	164	97.65

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Power Plant Performance Data  
Twelve Month Summary  
October, 2020 through September, 2021  
Hydroelectric Stations**

<b>Station Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Operating Availability (%)</b>
Blewett	118,298	27.0	80.91
Marshall	708	4.0	72.77
Tillery	263,979	84.8	90.39
Walters	460,001	113.0	61.75

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.